5

## **ABSTRACT**

A method performs a radix search data structure. The method selects a reference table based on a value of a selectable parameter. The reference table includes at least one of a valid reference table and a transition reference table, and contains a set of data bits. The method receives a key containing a set of data bits. The method indexes the reference table using at least a subset of data bits in the key. The method determines a result index based on at least a subset of data bits in the reference table. The method then indexes a result table based on the result index to reference a result of a radix search data structure.